

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,873	<b>Applicant(s)</b> YAMAMOTO ET AL.	
	<b>Examiner</b> John Cooney	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>20100902</u> .                           |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application  |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                          |



***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4-5-10 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 & 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kihara et al.(6,627,671) in view of GB-1,204,230.

Kihara et al. discloses preparations of polyurethane foams prepared from (1.) isocyanate prepolymers formed from toluene diisocyanates and polyols, (2.) polyol compositions including polyols as claimed by applicants and amine curatives, and (3.) water (see abstract, column 2 line 23 – column 5 line 17, and examples).

Kihara et al. differs from applicants' claims in that it does not particularly require employment of the chlorinated amine curatives of applicants' claims in its polyol composition. However, GB-'230(see title and page 1 lines 64 – page 3 line 84, as well

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as, the entire document) discloses the employment of the chlorinated amine curatives of applicants' claims in the realization of good polyurethane articles based on isocyanate terminated prepolymers. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the chlorinated amine curatives of GB-'230 in the preparations of Kihara et al. for the purpose of imparting their reaction curative effects in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Additionally, it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

As to the pre-blending conditions of applicants' claims, it is seen that the disclosure at column 4 lines 40-42 provides for this feature of applicants' claims. Even if difference were evident based on this feature of applicants' claims, it is held that Kihara et al. does disclose pre-blending of its polyol with water (column 4 lines 40-42), and such a manipulation of Kihara et al.'s own processing operations would have been obvious to one having ordinary skill in the art for purposes of providing adequate product formation in the absence of a showing of new or unexpected results.

As to the variations in the temperature conditions of applicants' processes, Kihara et al. provides for heating of its reactive elements, and it would have been within

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the skill of the ordinary practitioner to have varied the heating conditions from within the teachings of Kihara et al. for purposes of modifying and enhancing the mixing, interaction and/or reactivities of the systems in order to arrive at the processes and products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Applicants' arguments have been considered. However, rejection is maintained.

The following previous arguments are set forth again below:

It is maintained that the features of applicants' claims are adequately met by the combinations of the above cited prior art, and the blends of curatives of applicants' claims are adequately provided for by the teachings and fair suggestions of the secondary GB-'230 teaching in the address of the deficiencies of the primary, Kihara et al., teaching.

Applicants' arguments pertaining to the problem(s) of the prior art that are being addressed do not correspond with a commensurate in scope showing of new or unexpected results that are associated with differences in the claims. Adequate showings of new or unexpected results would require more than one specific blend of mixture A from within the scope of applicants' claims. Further, more encompassing selections of polyols from the scope of the claims would need to be represented by the showings.

Additionally, as to the problem being solved discussed in applicants' reply, it should be noted that obviousness does not require that the same problem be solved by the teachings of the prior art.

As to applicants' latest arguments, it is maintained that variation within the teachings and fair suggestions of GB-'230 are provided for by their fully considered disclosure. GB-'230's fully considered disclosure is not limited solely to its exemplified embodiments. Additionally, applicants' reference to molecular weight and viscosity

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differences between their claims and the cited prior art are unpersuasive because they do not have corresponding limitations in the claims.

It is maintained that GB-'230 provides for the general conditions of applicants' claims, and manipulation of the amounts of its respective curatives within its teaching involves only routine skill in the art. It is maintained here that it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Additionally, decisions rendered in other examination bureaus have no bearing on examination of the instant claims.

Applicants' amendment of the claims to "40/60" from "30/70" for the lower endpoint of the (A)/(B) ratio has been assistive in addressing arguments made in the final Office action (now removed from the previous arguments set forth again above). However, such does not negate the need for making the required showings discussed in the interviews dated 9-2-10 (accompanying this Office action) & 3-22-10.

As to applicants' results, in addition to the considerations discussed in the above referenced interviews, the following needs to be considered:

**Claims Must be Commensurate With Showings:**

Evidence of superiority must pertain to the full extent of the subject matter being claimed. *In re Ackerman*, 170 USPQ 340; *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *Ex Parte A*, 17 USPQ 2d 1719; accordingly, it has been held that to

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overcome a reasonable case of prima facie obviousness a given claim must be commensurate in scope with any showing of unexpected results. *In re Greenfield*, 197 USPQ 227. Further, a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemin*, 161 USPQ 288. See also *In re Kulling*, 14 USPQ 2d 1056.

Applicants' have not persuasively demonstrated unexpected results for the combinations of their claims. Applicants' have not demonstrated their showing to be commensurate in scope with the scope of combinations now claimed. As discussed in the interviews, the comparative showings employing one formulation representing component (A) of the claims and one polyol (PTMG){alone or with DEG} representing component (B) of the claims is insufficient representation of the invention of the claims in making a commensurate in scope showing on new or unexpected results attributable to differences in the claims. Additionally, as to comparative showings, the absence of comparative showings below the low end of the range of values corresponding to the binuclear compounds of component (A) is noted and needs to be represented in a showing of criticality for the ranges of the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Cooney/  
Primary Examiner, Art Unit 1796

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